PINES, B.Ya.; SIRENKO, A.F.

Calculated and experimental values of the durability of metals and alloys under load. Fiz.tver.tela 2 no.6:1043-1051 Je '60. (MIRA 13:8)

1. Fiziko-tekhnicheskiy institut AN USSR, Khar'kov.
(Metals) (Alloys) (Strains and stresses)

GOLIK, V.R.; SIRENKO, G.A.; KHOTKEVICH, V.I.; PINES, B.Ya.

X-rays determination of the distortion of crystal lattices. Fiz. met. i metalloved. 9 no.6:937-938 Je '60. (MIRA 13:7)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo i Ural'skiy institut metallov.
(Metallography)
(Crystal lattices)

S/020/60/134/005/[illegible]
B019/B060

AUTHORS: Pines, B. Ya. and Sirenko, A. F.

TITLE: The Mechanism of the Rupture Life of Metals Under Stress

716

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 5, pp. 1061 - 1064

TEXT: Attempts have been made in previous papers to explain the rupture life of metals under stress as a diffusion of microcracks rising to a critical size in metals with a subsequent avalanche like growth of the cracks. Other authors have been able to prove that the activation energy of the rupture process practically coincides with the activation energy of self-diffusion, and have thus again confirmed this view. The article under consideration reports on tests made on metalloceramic Cu-specimens, which confirm the diffusion mechanism. The copper specimens all had a composition deviating from the state of equilibrium. Rupture life under stress at room temperature, at 600°, 900°, and 1040°C was investigated. To avoid plastic deformations, the specimens had a sharp notch in the middle of the gage length. Tests revealed that the

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The Mechanism of the Rupture Life of Metals Under Stress

S/020/60/134/005/011/023
B019/B060

rupture life of specimens at room temperature is the same as in electrolytic copper. Differences, however, become considerable at higher temperatures. Preliminarily strain-hardened (cold-worked from 20 to 50% reduction) sintered specimens had a rupture life which was the shorter the higher the reduction. The shortest rupture life was recorded for electrolytic copper. These results are believed to confirm the theory of the diffusion mechanism of metal rupture under stress. There are 3 figures and 8 Soviet references.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo (Khar'kov State University imeni A. M. Gor'kiy)

PRESENTED: May 28, 1960, by G. V. Kurdyumov, Academician

SUBMITTED: March 16, 1960

Card 2/2

BOROVIK, Yevgeniy Stanislavovich; MIL'NER, Abram Solomonovich; PINES, B.Ya., prof., otv.red.; VAYNBERG, D.A., red.; TROFIMENKO, A.S., tekhred.

[Lectures on ferromagnetism] Lektsii po ferromagnetizmu. Khar'kov, Izd-vo Khar'kovskogo gos.univ., 1960. 234 p. (MIRA 13:11)

(Ferromagnetism)

PINES, B.Ya.; IMN OB SBN

Investigating internal friction in ceramic metals. Part 4:
Specimens of noninteracting binary powders. Fiz.met.i metalloved.
8 no.6:867-871 D '59. (MIRA 13:6)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.
(Powder metallurgy)

82321

S/063/60/005/002/004/[illegible]
A003/A001

18.6200

AUTHOR: Pines, B. Ya., Professor

TITLE: Sintering and Diffusion Creep of Metal-Ceramic Bodies

PERIODICAL: Zhurnal vsesoyuznogo khimicheskogo obshchestva im. D. I. Mendeleyeva, 1960, Vol. 5, No. 2, pp. 173-180

TEXT: The motion of substance in metal-ceramic bodies during sintering process takes place in the solid phase. Ya. I. Frenkel' has shown that it takes place as viscous flow under the action of capillary forces (Ref. 3). He expressed the relation between the fluidity coefficient $\frac{1}{\eta}$ (η is the viscosity coefficient) and the coefficient of self-diffusion D by the equation $\frac{1}{\eta} = \frac{D\delta}{kT}$, where k is Bolzmann's constant, T is the absolute temperature, δ is the linear atom dimension. Frenkel' considered the sintering process of powders as taking place in two stages: the first stage consists in the "fusion of drops", the second stage is the filling of inner hollows which are present in a viscous body. A formula for the pure diffusion calculation is also cited. Experimental data on the time dependence of shrinkage during sintering are difficult to analyze. A formula is cited. Deviations can occur 1) if pores of different size are present in the body, 2) due

Card 1/2

Sintering and Diffusion Creep of Metal-Ceramic Bodies 02321

S/[illegible]

A[illegible]

to gas pressure in closed pores, [illegible] due to a change of the co[illegible] constants in the "relaxation" process. The author gives a formula [illegible] dependence of the number of [illegible] variation on the time (Ref. [illegible]) [illegible] obtained were confirmed by experimental data from an investigation [illegible] kinetics of isothermal sintering in samples compressed from electrolytic powder and from iron powder reduced from scale. Diffusion creep under the [illegible] of outer forces was studied, which presented a particular interest [illegible] behavior of bodies in a state close to thermodynamic equilibrium [illegible] Data on diffusion creep observed in metal-ceramic bodies subjected to [illegible] high temperatures (Ref. [illegible]) showed that the greatest creep deformation [illegible] in samples in the initial non-equilibrium state. The "elastic aftereffect" during creep (Ref. 22) is caused by the micro-inhomogeneity [illegible] under the action of non-homogeneous shift stresses in crystalline bodies. [illegible] action of applied forces causing creep deformation, all diffusion processes sintering, recrystallization, heterodiffusion, etc., are slowed down (Ref. [illegible]). In the case of small capillary forces and high temperatures the principal mechanism of the motion of substance is diffusion creep. In systems, in which mutual solubility during heating to high temperatures takes place, heterodiffusion sets in (Ref. [illegible]). There are [illegible] figures and [illegible] references: [illegible] Soviet, [illegible] German and 1 Italian.

Card 2/7

PINES, B.Ya.; SIRENKO, A.F.

Investigating diffusion creep in ceramic metal materials.
Issl.po zharopr.splav. 4:301-310 '59. (MIRA 13:5)
(Ceramic metals--Testing) (Creep of materials)

24.4100
18.8200

81615
S/181/60/002/06/03/050
B122/B063

AUTHORS: Pines, B. Ya., Sirenko, A. F.

TITLE: Calculated and Experimental Values of the Durability of Loaded Metals and Alloys

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 6, pp. 1043-1051

TEXT. In the article under review, the authors compare the experimental values of the durability τ of loaded Sn, Pb, Al, Pt, Ag, and Cu with the values calculated from formula (1) (Ref. 1):

$\tau = C\frac{(kT)^2 E}{p^3 \delta^4 D} \exp\left(-\frac{p\delta^3 \sqrt{n_0}}{kT}\right)$ (1). p - pressure of the load, D - coefficient of natural diffusion, E - Young's modulus, δ - atomic linear dimension, n_0 - primary number of lattice vacancies, C - a constant. The experimental values of Pb, Sn, and Cu were determined in this work, and the values of Al, Pt, and Ag were taken from publications. Formula (1) is based upon the assumption of the tearing process propagating like a diffusion process

Card 1/3

81615

Calculated and Experimental Values of the Durability of Loaded Metals and Alloys

S/181/60/002/06/03/050
B122/B063

Previous papers by the authors had shown that the activation energy U_0 of the process leading to a rupture of the sample, and the values of the activation of self-diffusion are practically equal (Refs. 2,4), but that the use of the empirical formula (2) $\tau = Ae^{-ap+\frac{U_0}{RT}}$, where A and a are constants, involves some difficulties in the determination of U_0 (Ref. 3). Experiments on Sn, Pb, and Cu as well as a comparison of data known from publications concerning the durability of the metals Al, Pt, and Ag under load showed that the durability τ as dependent on p and T is very well reproducible by formula (1) in experiments conducted at room temperature and higher temperatures. On a proper selection of coefficient C in formula (1), the activation energy of the tearing process for all metals within the error limits is in fairly good agreement with the activation energies of self-diffusion. When trying to determine the activation energy from formula (2), in which, since A = const., the pre-exponential factor is independent of P and T, only few empirical constants were obtained, and not U_0 itself. Formula (2) cannot be used to calculate U_0 of alloys. Figs. 1-7 show experimental and calculated

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81615

Calculated and Experimental Values of the Durability of Loaded Metals and Alloys

S/181/60/002/06/03/050
B122/B063

dependences τ - p for the various metals. The student I. F. Romanenko is mentioned. There are 6 figures and 13 references: 12 Soviet.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN USSR, Khar'kov
(Physicotechnical Institute of the AS UkrSSR, Khar'kov)

SUBMITTED: December 3, 1959

Card 3/3

PINES, B.Ya.; SIRENKO, A.F.

Recovery under load in the process of diffusion creep in ceramic metals. Izv.vys.ucheb.zav.; chern.met. no.5:121-129 '60. (MIRA 13:6)

1. Khar'kovskiy gosudarstvennyy universitet.
(Ceramic metals--Testing) (Creep of metals)

S/126/60/009/06/022/025
E073/E335

AUTHORS. Golik, V.R. Sirenko, G.A., Khotkevich, V.I. and Pines, B.Ya.

TITLE. On the Problem of X-ray Deformation of Distortions in the Crystal Lattice 21 21

PERIODICAL Fizika metallov i metallovedeniye, 1960, Vol 9, Nr 6, pp 937 - 938 (USSR)

ABSTRACT This is a reply to the criticism of Smirnov (see pp 936 - 937 of this issue) by the authors of the two papers referred to, i.e. "X-ray Diffraction Studies of Lattice Distortions in Metals Deformed at Low Temperatures" by Golik, Sirenko and Khotkevich and the paper published in Dokl.Ak.nauk SSSR, 1955, Nr 103, p 601 by B.Ya. Pines.

ASSOCIATIONS Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo (Khar'kov State University im A.M. Gor'kiy)
Ural'skiy institut metallov (Ural Institute of Metals)

SUBMITTED January 15, 1960

Card 1/1

81830
S/181/60/002/05/23/041
B004/B056

18 8200

AUTHORS: Pines, B. Ya., Ivanov, I. G.

TITLE: The "Aftereffect" in Metal Samples Which Had Been Exposed to Diffusion Creep at High Temperatures

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 5, pp. 959 - 966

TEXT: The authors carried out experiments with samples made from cast copper or copper cermets (grain size < 50 μ). The samples were heated to temperatures of from 850 to 1070°C and exposed to a stress of from 30-50 g/mm^2. The deformation after removal of the stress was measured. Experimental data for different temperatures, samples, and stresses are given in Figs. 1-6. An aftereffect, a deformation with reversed sign, was observed as soon as the stress was removed. At constant temperature the ratio between the amount $\varkappa$ of the aftereffect and the creep rate v does not depend on the applied stress. With increasing temperature $\varkappa$ becomes small and tends towards zero at the melting-point. At constant v the same temperature dependence exists for $\varkappa$ as for that stress which

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The "Aftereffect" in Metal Samples Which Had Been Exposed to Diffusion Creep at High Temperatures

81890
S/181/60/002/05/29/041
B004/B056

is necessary for realizing the given v. In the case of samples that are not in equilibrium, $\varkappa$ decreases with decreasing v at constant stress and temperature. Besides on v, $\varkappa$ depends on the creep deformation. In the case of a slight deformation, $\varkappa/\varepsilon$ tends toward unity. With increasing deformation $\varkappa/\varepsilon$ at first decreases quickly, and later slowly and becomes nearly constant by strong deformation. The phenomena observed are explained by micro-nonhomogeneities of the polycrystalline samples, which are caused by the diffusion creep. In the crystal germs of new "atomic faces" are formed by creep which gradually lead to an irreversible extension of the sample. There are 6 figures and 4 Soviet references.

ASSOCIATION: Khar'kovskiy universitet (Khar'kov University

SUBMITTED: June 23, 1959

Card 2/2

PINES, B.Ya.; CHAYKOVSKIY, E.F.

Effect of plastic deformation of nickel on the rate of diffusion in the system Ni - S. Fiz.met.i metalloved. 9 no.3:369-373 Mr '60.
(MIRA 13:6)

1. Khar'kovskiy gosudarstvennyy universitet im. A.M.Gor'kogo.
(Nickel) (Diffusion)

81904

18.6100

S/126/60/010/01/006/019
E111/E335

AUTHORS: Pines, B.Ya. and Den Ge Sen

TITLE: Investigation of Internal Friction in Cermets.
V. Low-temperature Effects Due to Plastic Deformation

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol.10, No. 1, pp 58 - 62

TEXT: The temperature dependence of internal friction at room temperatures and down to -150 °C has been studied for sintered specimens of pure (99.99%, electrolytic) copper and of pure nickel (99.998%, carbonyl). The specimens were subjected to plastic deformation by compression in a previously described machine (Ref.10). Within 15-20 min after deformation specimens were under test in an evacuated and cooled Dewar vessel. Measurements at a vibration frequency of about 1 cps were made both during heating and cooling at about 2 °C/min. Internal friction versus temperatures for copper and nickel are shown in Figs. 1 and 2, respectively; the curves relate to a range of heat-treatment of deformation conditions. For plastically deformed copper the curves show one maximum in the range

Card 1/2

81904
S/126/60/010/01/006/019
E111/E335

Investigation of Internal Friction in Cermets. V. Low-temperature Effects due to Plastic Deformation

-75 to -90 °C; with nickel there is one at -35 to -50 and another at -95 to -110 °C. These maxima are due to plastic deformation and are probably associated with dislocation movement. Plastic deformation and annealing after deformation have the same effect at low temperatures as at high ones. The position of the maximum is displaced towards low temperatures, its height increases with increasing plastic deformation and decreases (finally disappearing) with annealing after deformation. The activation energy determined from the frequency displacement is 5.6 kcal/mol for copper. There are 2 figures and 13 references: 4 are Soviet, 7 English, 1 Italian and 1 international.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo (Khar'kov State University im. A.M. Gor'kiy)

SUBMITTED: January 25, 1960

Card 2/2

L [illegible]012-67 EWP(e)/EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/HW
ACC NR: AP6027790 (N) SOURCE CODE: UR/0126/66/022/001/0082/0086

AUTHOR: Pines, B. Ya.; Knizhkovyy, V. P.

ORG: Khar'kov State University im. A. M. Gor'kiy (Khar'kovskiy gosuniversitet)

TITLE: Temperature dependence of linear creep limit

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 1, 1966, 82-86

TOPIC TAGS: temperature dependence, creep, powder metal, metal crystal

ABSTRACT: The article presents the results of an experimental determination of the characteristics of high-temperature creep ($\alpha = v/p$; p_0, where v is the rate of steady-state creep, p is the applied stress and p_0 is the linear creep limit) for monocrystals and powders and castings of Co, Cu, Ni and Fe at pre-melting-point temperatures. In the linear creep region the rate of steady-state creep for powder specimens is one order of magnitude higher than for monocrystalline specimens. The kinetics of creep for $p < p_0$ in the high-temperature range (700-1500°C) corresponds to the course of the process of self-diffusion. Hence, the powders of Cu (and also of Ni, Fe) display a creep rate roughly one order of magnitude higher than that of the monocrystals of these metals. As the duration of high-temperature annealing

Card 1/3 UDC: 539.376

(sintering) increases, creep rate decreases, owing to the approach of the powder specimens to a thermodynamic equilibrium (decrease in dislocation density). p_0 is proportional to the modulus E of elasticity. When normalized with respect to E, the values of linear creep limit as a function of adjusted temperature lie satisfactorily along a straight line for all the metals investigated. (Fig. 1) The resulting linear dependence is apparently of a general nature. The

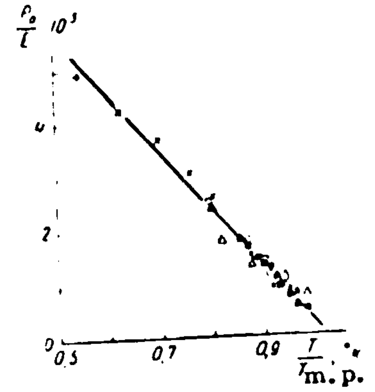

Fig. 1. p_0, normalized with respect to the modulus of elasticity, as a function of the adjusted temperature $T/T_{m.p.}$ for different specimens

x - Fe powder; Δ - Ni powder; □ - Co monocrystal; o - Ni monocrystal; O - Cu monocrystal; Δ - Al monocrystal

L 09912-67
ACC NR: AP6027790

patterns of the temperature dependence of p_0 resemble those known for yield point, and hence p_0 may be interpreted as an analogue of yield point at higher temperatures (at finite straining rates). Orig. art. has: 8 figures, 1 formula.

SUB CODE: 11,20/ SUBM DATE: 28Aug65/ ORIG REF: 006/ OTH REF: 002

Card 3/3 nst

PINES, David

Superconductivity in the periodic system of elements. Postepy fizyki 12 no.5:491-508 '61.

1. Palmer Phys. Lab., Princeton Univ. Princeton, New Jersey.

ZLATOVEROV, A.I.; KOZLOVA, V.A.; PINES, D.N.

Pressure in the temporal and brachial arteris during the orthostatic test as a method for detecting cerebral hypertension. (MIRA 16:2)
Sov.med. 26 no.12:38-44 D '62.

1. Iz kafedry nervnykh bolezney Kuybyshevskogo meditsinskogo instituta.
(CEREBROVASCULAR DISEASE) (BLOOD PRESSURE)

PINES, F.

UA

7

The composition and properties of some foreign (German and American) soaps. G. Petrov and F. Pines. *Masloboino Zhirovoe Delo* 1930, No 3, 80. The compns and consts (including Stiepel's foam nos.) are tabulated. E. Bielouss

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

L 12289-63 EWP(j)/EPF(c)/EWT(m)/BDS Pc-4/Pr-4 RM/WW

S/081/63/000/005/046/075 64 63

AUTHOR: Savostin, A. P., Pines, G. D. and Koval'chuk, L. A.

TITLE: Contact conversion of methyl-tert-butyl ether into isobutylene

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 5, 1963, 413, abstract 5N8 (Vestn. Tekhn. i ekon. inform. N-i. in-t tekh-ekon issled. Gos. kom-ta Sov. Min. SSSR po khimii, 1962, no. 4, 20 - 21)

TEXT: The catalytic splitting of methyl-tert-butyl ether (I) into $CH_2 = CH(CH_3)_2$ II was investigated in a quartz tube (diam. 27 mm, length 1000 mm), filled with 200 ml of active Al_2O_3 (length of the layer 400 mm, Al_2O_3 previously heated to 400°C for 4 hours) and placed in a tubular electric oven 800 mm long. An industrial mixture was used, containing 93 - 94% I, 2 - 3% CH_3OH and 1 - 2% water. I forms azeotropes with the latter with b.p. 51.6°C (content CH_3OH 15%) and 52.6°C (water content 4%). 15 ml of I are passed through the tube. The liquid products, containing up to 25% CH_3OH, are condensed in a cooler, gathered in a container and cooled by ice. Gaseous products are gathered in a gas meter, are then passed in an Orsa apparatus through containers filled with alkali, 53% H_2SO_4 and Br_2, for determining the CO_2 content, II and butylenes. The effect of temperature of contact in

Card 1/2

L 12289-63 S/081/63/000/005/046/075

Contact conversion of .....

the 175 - 380°C range was studied and the inflow rate of I at 0.65 kg/hour per 1 kg of catalyst (KT) and the inflow rate of I at 0.26 - 1.6 kg/hour at 250°C on the yield of II. KT is periodically regenerated by passing a slow current of air (2 hours at 500°C through it, until CO_2 is not present in the air blown through. The dependence of yield of II on the duration of action of KT at 250°C is discussed and of the rate of inflow of I at 0.56 kg/hour. The optimum conditions were established for conducting the reaction: temperature of contact, 250°C, the inflow rate of I at 0.56 - 0.8 kg/hour; yield of II — 96%; KT is regenerated over a period of 20 - 25 hours. I is contained in by-products, formed in the synthesis of isoprene by the condensation of II with CH_2O. V. Litvinov.

[Abstractor's note: Complete translation]

Card 2/2

PINES, G.TS., dotsent; KOVRIZHKO, N.M., kand.med.nauk

Clinical aspects of scleroma of the respiratory organs. Zhur. ush., nos. i gorl. bol. 20 no.1:73-75 Ja-F '60. (MIRA 14:5)

1. Iz 1-y gorodskoy klinicheskoy bol'nitsy Pecherskogo rayona Kiyeva. (RESPIRATORY ORGANS—DISEASES)

PINES, Ignacy, dr inz.

Precision of methods of determining some toxic substances in the air using the Pulfrich photometer. Pts. 1-4. Chem anal 9 no.1:[illegible] '64.

1. District Sanitary Epidem. Station, Department of Labor Hygiene, Katowice.

PINES, Ignacy

Application of mathematical statistics in a chemical industrial laboratory. Chem anal 5 no.1:149-161 '60. (EEAI 9:11)

1. Huta Baildon, Katowice
(Mathematical statistics)

S/123/59/000/09/16/036
A002/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1959, No. 9, p. 103, # 33626

AUTHOR: Pines, N. V.

TITLE: The Effect of Heating on the Microhardness of Gray Cast Iron

PERIODICAL: Tr. Kuybyshevsk. aviats. in-t, 1958, No. 7, pp. 169-182

TEXT: The effect of isothermal holding at temperatures of 650 and 700°C on the microhardness of gray cast iron was studied. It was established that a decompositon, not only of pearlite, but also of the phosphide eutectic takes place during the process of subcritical heating and holding of gray cast iron. The microhardness of the eutectic decreases gradually in connection with a decomposition of iron phosphide. In this case, phosphorus diffuses into the nearest sections of a ferrite grain, increasing their hardness. The microhardness of more distant ferrite grain sections remains practically unchanged. Increasing the hardness of ferrite by enriching it with P will counteract to some degree a hardness decrease due to pearlite decomposition. A longer

B

Card 1/2

S/123/59/000/09/16/036
A002/A001

The Effect of Heating on the Microhardness of Gray Cast Iron

annealing can result in a somewhat greater hardness (as a result of the P diffusion), compared to shorter annealing, during which only the pearlite decomposition occurs. There are 12 figures and 2 references.

S. E. D.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

PHASE I BOOK EXPLOITATION SOV/3350

SOV/9-M-8(11)

Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii [illegible]
Vernadskogo. Komissiya po analiticheskoy khimii

Spektrofotometricheskiye i kolorimetricheskiye [illegible]
metric and Colorimetric Methods of [illegible]
(Its: Trudy, tom. 8 (11)) Errata slip [illegible]

Resp. Ed.: I. P. Alimarin, Corresponding [illegible]
Ed. of Publishing House: V. N. [illegible]

PURPOSE: The publication is intended for ch[illegible]
chemists and geochemists.

COVERAGE: This collection of 29 articles [illegible]
Transactions of the Committee on [illegible]
Geochemistry and Analytical Ch[illegible]
Sciences USSR. The general subject of [illegible]
spectrophotometric and [illegible]
lowing topics are discussed: [illegible]
absorption analysis, the [illegible]
organic analysis, the basic [illegible]
spectrophotometric investigation of [illegible]
colorimetric method of determining [illegible]
metric method of determining [illegible]
the behavior of acid-base indicators [illegible]
acoustical method of gas analysis, and a [illegible]
spectrophotometric gas analyzer. No personalities are m[illegible]
are given at the end of each article.

[illegible]

[illegible]
[illegible]
Waters

Avilov, V. B. Spectrophotometric Studies of the [illegible]
[illegible] Indicators

Fialkovskaya, O. V. Developing Methods of Infrared Spectrum Analysis of the Distillation Products of Raw Benzene and the Light Fractions of Shale, Natural Gasoline, and Oil [illegible]

[illegible], Z. N., V. L. Sergina, E. G. Pereval'ova and I. V. [illegible]. Applying the Spectrophotometric Method to the Analysis of the Lower [illegible] of Semicoke Tars 243

Slobodskaya, P. V., Ya. I. Gerlovin, and N. L. [illegible]. Phonometric Optical-Acoustical Method of Gas Analysis 252

Babushkin, A. A., B. A. Gvozdev, and P. Ya. Tikhonov. Photoelectric Attachment for a Spectrograph for Absorption Analysis 258

Varbotin, A. M., Sh. S. Shchegol', and A. I. Finkel'shteyn. Automatic Spectrophotometric Gas Analyzer 266

Fisher, A. M., and A. I. Finkel'shteyn. Instrument for the Photometric Determination of a Potassium Flame Under Industrial Conditions 272

Pinus, V. G., V. V. Balinov, and S. A. [illegible]. Statistical Study of Instrument Errors in Working With Photoelectric Colorimeters FEK and FEK-M 279

AVAILABLE: Library of Congress

JA/dwm/fal
8-29-60

Card 6/6

2 4

SOV/19-58-6-[illegible]/[illegible]

AUTHORS: Fistul', V.I., and [illegible], G.E.

TITLE: A Method of Producing Detector Crystals for Superhigh Frequencies (Sposob izgotovleniya detektornykh kristallov dlya sverkhvysokikh chastot)

PERIODICAL: Byulleten' izobreteniy, 1958, Nr [illegible], p [illegible] (USSR)

ABSTRACT: Class 21g, 12_{Cl}. Nr 113405 ([illegible] of 14 Jan 1957). Submitted to the Committee for Inventions and Discoveries at the Ministers Council of USSR. A method of producing detector crystals for superhigh frequencies by depositing a mixture of boron and silicon from a gas mixture upon a graphite base; even distribution of the boron in the layers of [illegible] of the boron in the layers [illegible] over the graphite base, and [illegible]

Card 1/2

SOV/[illegible]-58-[illegible]

A Method of Producing Detector Crystals for Superhigh Frequencies

thickness of the layers is achieved by depositing silicon and boron from the arc discharge plasm of the ion source [illegible] is [illegible] separating device, and then crystallizing the deposited elements by heating the [illegible] base to the required temperature.

Card 2/2

[illegible]

Rukvodstvo k [illegible] ([illegible] theor. [illegible]). Leningrad, [illegible]

S : [illegible]. V [illegible]

YEVSEYEV, M.Ye.; LAMAGIN, K.A.; MERKIN, G.B.; MOROZOVA, I.A.; ORANSKIY, M.I.; PARAMONKOVA, V.I.; KAZARNOVSKIY, D.M., prof., retsenzent; GOL'DIN, O.Ye., dots., retsenzent; PINES, G.Ya., dots., retsenzent; VOL'FE, L., red.

[Alternating current theory; manual on the solution of problems in the theoretical principles of electrical engineering] Teoriia peremennykh tokov; posobie k resheniiu zadach po teoreticheskim osnovam elektrotekhniki. [By] M.E.Evseev i dr. Leningrad, Severo-Zapadnyi zaochnyi politekhn. in-t. Pt.2. 1964. 337 p. (MIRA 18:7)

1. Kafedra "Teoreticheskiye osnovy elektrotekhniki" Leningradskogo elektrotekhnicheskogo instituta svyazi im. Bonch-Bruyevicha (for Gol'din, Pines).

Pines, G. Ya.

8(0) SOV/105-59-5-26/29

AUTHORS: Ginzburg, S. G., Greyner, L. K., Zakharov, S. N., Kaplyanskiy, A. Ye., Berman, L. R., Netushil, A. V., Petrov, L. S., Pines, G. Ya., Polivanov, K. M., Savenko, V. S., et al

TITLE: Vladimir Borisovich Romanovskiy

PERIODICAL: Elektrichestvo, 1959, Nr 5, p 95 (USSR)

ABSTRACT: On January 13, 1959, Vladimir Borisovich Romanovskiy, Professor, Doctor of Technical Sciences, died at the age of [illegible]. He started his activity as an engineer in the design office of the "Elektroapparat" Works in 1926. Soon he became head of the works laboratory. Since 1937, he was head of the Chair of Theoretical Electrotechnics at the Leningradskiy elektrotekhnicheskiy institut svyazi im. M. A. Bonch-Bruyevicha (Leningrad Communications Electrical Engineering Institute imeni M. A. Bonch-Bruyevich). At the same time, he maintained his relations to the works where he was a counsel, chief electrical engineer and a permanent member of the technical council. He is one of the founders of the theoretical principles for the building of high-voltage apparatus. At the chair he was occupied with calculations of transition processes in electric current circuits which were also the subject of his doctoral thesis. He published more than 40 scientific papers.

Card 1/2

He bore the Badge of Honor and various medals. There is 1 figure.

Card 2/2

KRATIROV, A.D.; GOL'DIN, O.Ye.; SAVENKO, V.G.; PINES, G.Ya.; KOCHENOVA, A.I.; GREYNER, L.K.; ARONOVICH, I.S.; KHOLYAVSKIY, G.B.

Professor V.B. Romanovskii. Elektrichestvo no.2:92 F '56. (MLRA 9:5)

(Romanovskii, Vladimir Borisovich, 1896-)

PIPES, [illegible] Ya.

Technology

Laboratory manual for the theory of alternating currents, Leningrad, [illegible], Bonch-Bruevicha, 1952

Monthly List of Russian Accessions, Library of Congress, June [illegible], Uncl.

PINES, H.

"Polymerisation de l'ethylene sous pression elevee en presence d'acide phosphorique a 250–300°". Ipatjiew, W. N. et Pines, H. (p. 3 1)

30: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1936, Vol. 6, No. 3

PINES, HERMAN

"Influence de la concentration de l'acide sulfurique sur la reaction des olefines avec la benzene". Ipatiew, [illegible], [illegible], and Pines, Herman. [illegible]

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii), [illegible], Vol. [illegible], No. [illegible]

PINES, HERMAN

"Acide phosphorique comme catalyseur pour l'alcalisation destructive des hydrocarbures"
Ipatiew, W. N., Komarewskij, W. I. et Herman Pines. (p. 1525)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1936, Vol. 6, No. 10

PROCESSES AND PROPERTIES INDEX

ca

4

Polarographic studies with the dropping mercury cathode. IV. The deposition of zinc from cyanide solutions. I. Pinks. *Collection of Czechoslovak Chem. Communications* 1, 429-42(1929); cf. C. A. 23, 5391.—Zn deposits from solns. of K and Zn cyanides at the dropping Hg cathode as long as the cyanide content does not exceed 4KCN:$Zn(CN)_2$. With greater excess of KCN only K is deposited. The polarograms of solns. contg. little or no excess of KCN over the ratio $1ZnCl_2$:3KCN, prepd. by suspending well washed $Zn(CN)_2$ in KCN solns., show no deposition after that of K but exhibit 3 distinct deposition stages at potentials more pos. than that of K. These 3 waves are not due to impurities in the reagents or to the evolution of H_2 but to the deposition of Zn at 3 distinctly different potentials. In the 0.01 *N* KCN soln. satd. with $Zn(CN)_2$, Zn deposits from simple Zn^{++} ions at −1.03 v., from anions $Zn(CN)_4^{--}$ at −1.23 v. and from anions $Zn(CN)_6^{----}$ at about −1.4 v. The anions $Zn(CN)_6^{----}$, assumed to be formed in excess of KCN are not decompd. below the deposition potential of K. The complex anions, which are supposed to come slowly into equil. with free Zn and cyanide ions, have consts. $\frac{[Zn^{++}][CN^-]^4}{[Zn(CN)_4^{--}]} = 10^{-19}$, $\frac{[Zn^{++}][CN^-]^6}{[Zn(CN)_6^{----}]} = 6.8 \times 10^{-?}$, the soly. product $[Zn^{++}][CN^-]^2 = 2.6 \times 10^{-?}$. Evidence is adduced from ordinary and a. c. electrolysis and this work that not the great complexity but the slowness of dissocn. of the complexes hinders the deposition of Zn from K-Zn-cyanide solns. Graphical curves and tables of data are given.

Charles J. Pedersen

METALLURGICAL LITERATURE CLASSIFICATION

PINES, L.N.

Laughter as an equivalent of epilepsy. Zhur. nevr. i psikh. 63 no.9:1341 1346 '63. (MIRA 17:8)

1. Kafedra nervnykh bolezney (zav. - prof. E.I. Yeselevich) Orenburgskogo meditsinskogo instituta.

LYUBCHINSKIY, E.B.; PINES, L.P.

Kinesimetric indices of the Achilles tendon reflex in relation to age. Zhur. nevr. i psikh. 64 no.3:331-333 '64.
(MIRA 17:5)

1. Kafedra nervnykh bolezney (zaveduyushchiy - prof. E.I. Yeselevich) Orenburgskogo meditsinskogo instituta.

HI [illegible], I. P-a

"The Phenomena [illegible]
by Hi[illegible]s, I. [illegible]

SO: Journal [illegible] III, [illegible]

PINES, L.Ya., professor, doktor meditsinskikh nauk.

Origins of anatomico-clinical divergencies in traumatic brain injuries. Trudy Gos.inst.po izuch.mozga 15:9-16 '47. (MLRA 7:2)

(Brain--Wounds and injuries)

PINES, L. Ya.

"On the Problem of Recapitulation Phenomena in the Ontogenesis [illegible] Brain." Zef. Zhur., Vol 33, No [illegible], 1947, p [illegible]. Inst of the Brain imeni V. M. Bekhterev and Physiology Inst imeni Academician I. P. Pavlov, Acad Sci USSR.

SO: U-[illegible]

[illegible], L. YA., ed.

Ontogenesis of the brain; transactions of the Department of Morphology. Leningrad, 1949. 447 p. (Trudy [illegible] [illegible], t. [illegible]

1. Brain.

[illegible]

See: [illegible]

Pines. L. Ya. [illegible]

[illegible]

PINES, L.Ya., zasluzhennyy deyatel' nauki, professor

Phenomena of progressive and regressive evolution in the structures [illegible]
of the human brain. Trudy Gos.inst. po izuch.mozga [illegible]
(BRAIN)

[illegible], [illegible]

3213. [illegible]
[illegible]

SO: Knizhnaya Letopis' No. 6, 1955

KURENEV, S.I., doktor tekhn.nauk, prof.; PINES, M.I., kand.tekhn.nauk, dots.

Determination of initial conditions in the study of transient processes with changes in the circuit structure. Elektrichestvo no.9:45-49 S '60. (MIRA 13:10)

1. Leningradskiy elektrotekhnicheskiy institut im.Ul'yanova (Lenina).
(Electric networks) (Transients (Electricity))

KOZHEVNIKOV, A.D.; PINES, M.I.; FORTUNATOV, V.A.; GUNIK, A.A., nauchn. red.; ISAYENKO, Ye.M., red.

[Basic capital assets in lumber floating] Osnovnye fondy lesosplava. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoz., 1964. 16 p. (MIRA 18:[illegible])

1. TSentral'nyy nauchno-issledovatel'skiy institut lesosplava (for Kozhevnikov, Pines).

PINES, M.Ye.; SMORODSKIY, P.V.; KITAYSKIY, Ye.V., red.; MURONETS, I.I., red.; BRUDNO, K.F., tekhn. red.

[German-Russian mining dictionary] Nemetsko-russkii gornyi slovar'. Pod red.E.V.Kitaiskogo. Moskva, Glav.red.inostr.nauchno-tekhn. slovarei Fizmatgiza, 1961. 428 p. (MIRA 14:12)

(German language—Dictionaries—Russian)
(Mining engineering—Dictionaries)

PINES, Moisey Il'ich, kand.tekhn.nauk, dotsent

Conditions of physical feasibility of equivalent linear passive two-stage two-terminal networks containing elements of two forms (R,L), (R,C), (L,C). Izv. vys. ucheb. zav.; elektromekh. 6 no.5:539-550 '63. (MIRA 16:9)

1. Leningradskiy elektrotekhnicheskiy institut.
(Electric networks)

PINES N V

rK

1

Fatigue strength of nitrided steel. N. V. Pines. *Metallurg* 11, No. 9, 51-5(1936). Steel contg. C [illegible], Mn 0.40, Si 0.21, Cr 1.46, Ni 0.13, Mo 0.22 and Al [illegible]%, was nitrided to a depth of 0.15 to 0.51 mm. The fatigue limit, in kg. per sq. mm., was: untreated 43.5 [illegible] case .0[illegible], 0.32 mm. case 43.5 and 0.52 mm. case [illegible]. The fracture in the nitrided specimens always started under the case while in the untreated specimens the fracture always started on the surface. H. W. Rathmann

METALLURGICAL LITERATURE CLASSIFICATION

PINES N.V.

CA

9

Resistance of alited steel to corrosion by sulfur dioxide. N. V. Pines. *Korroziya i Bor'ba s Nei* 6, No. 1, 9-14 (1940).—The use of alited steel (i. e., steel surface-treated with Al, cf. *C. A.* 32, 9013^4; 35, 4320^9) in the contact app. for H_2SO_4 manuf., and the methods of producing alited steel were investigated. Sheet steel contg. 0.15% C was alited with a mixt. of powd. ferro-aluminum (44% Fe) and fired clay soil treated with NH_3, or with kaolin. Best mech. properties and greatest resistance to corrosion were produced by heating 12 hrs. rather than 6 hrs., at 1000° rather than at 750°, with more than 60% of Fe-Al in the mixt., and with clay soil rather than kaolin. On exposure to air contg. 10% SO_2, at 625-725°, samples of alited steel produced under the various conditions increased in wt. 0.07-0.60 g. per sq. m. per hr.; controls of plain C steel increased 10.80-12.88 g. per sq. m. per hr. The conditions of the test were more severe than the conditions in H_2SO_4 manuf.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

PINES, S. R.

Scalping wounds of the scrotum as an unusual form of agricultural injury. Khirurgiia 38 no.5:127-129 My '62. (MIRA 15:6)

(SCROTUM--WOUNDS AND INJURIES)
(AGRICULTURE--ACCIDENTS)

PINES, S. R.

Case of a foreign body in the cranial cavity. Khirurgiia 38 no.5:125-126 My '62. (MIRA 15:6)

1. Iz urologicheskogo otdeleniya (nauchnyy rukovoditel' - dotsent Ye. G. Libgott) oblastnoy klinicheskoy bol'nitsy (glavnyy vrach K. I. Shekhurdina) i kafedry fakul'tetskoy khirurgii (zav. - prof. A. I. Manuylov) Omskogo meditsinskogo instituta imeni M. I. Kalinina.

(BRAIN—FOREIGN BODIES)

PINES, Yu.L.

Electrophysiological characteristics of efferent and afferent connections of the adrenals with the central nervous system. Fiziol. zhur. 48 no.6:677-683 Je '62. (MIRA 15:8)

1. From the Laboratory for Electrophysiology, I.P.Pavlov Institute of Physiology, Leningrad.
(ADRENAL GLANDS--INNERVATION) (NERVOUS SYSTEM) (ELECTROPHYSIOLOGY)

PINES, Yu.L.

Cortical appearance of the receptor apparatus of the kidneys according to data from an electrophysiological study. Nauch. soob. Inst. fiziol. AN SSSR no.1:158-160 '59. (MIRA 14:10)

1. Laboratoriya elektrofiziologii (zav. - V.Ye.Delov) Instituta fiziologii imeni Pavlova AN SSSR.
(KIDNEYS) (ELECTROPHYSIOLOGY)

PINES, Yu.L.

Efferent and afferent impulses in nerves of the kidney during the development of experimental neurogenic hypertension.
Biul. eksp. biol. i med. 53 no.5:46-50 My '62.
(MIRA 15:7)

1. Iz laboratorii elektrofiziologii (zav. V.Ye. Delov) Instituta fiziologii imeni I.P. Pavlova (dir. - akademik V.N. Chernigovskiy) AN SSSR, Leningrad. Predstavlena akademikom V.N. Chernigovskim.
(HYPERTENSION) (KIDNEYS—INNERVATION)

PINES, Yu.L.

Efferent and afferent impulses in nerves of the kidney during the development of experimental neurogenic hypertension. Biul. eksp. biol. i med. 53 no.5:46-50 My '62. (MIRA 15:7)

1. Iz laboratorii elektrofiziologii (zav. V.Ye. Delov) Instituta fiziologii imeni I.P. Pavlova (dir. - akademik V.N. Chernigovskiy) AN SSSR, Leningrad. Predstavlena akademikom V.N. Chernigovskim.
(HYPERTENSION) (KIDNEYS—INNERVATION)

PINES, Yu.L.

Electrophysiological investigation of vascular mechanoreceptors of kidneys. Fiziol.zhur. 45 no.11:1339-1347 N '59. (MIRA 13:5)

1. From the electrophysiological laboratory, I.P. Pavlov Institute of Physiology, Leningrad.
(KIDNEYS blood supply)

PINES, Yu.L.

Comparative electophysiological and functional characteristics of relatively slow and fast oscillations in potential of afferent impulses in the renal nerves. Trudy Inst.fiziol. 8:395-403 '59. (MIRA 13:5)

1. Laboratoriya elektrofiziologii (zaveduyushchiy - V.Ye. Delov) Instituta fiziologii im. I.P. Pavlova AN SSSR.
(KIDNEYS--INNERVATION)

PINIGIN, A. F., VYBOROV, G. P. and PETUKHOVA, [illegible].S.

"About brucellosis in reindeers."

Veterinariya, Vol. 37, No. 1, 1960, p. 30

PINES, N. V.

PA 196T94

USSR/Metals - Cast Iron, Heat Treatment

Jun 51

"Quenching Cast Iron Products Directly From Molds," N. V. Pines, Cand Tech Sci, Kuybyshev Avn Inst

"Litey Proizvod" No 6, pp 22-24

Expts conducted for quenching castings directly from molds, when they still have sufficiently high temp, thus, eliminating reheating for hardening. Analysis of results shows slightly higher hardening ability. Possibility of quench crack formation is lower as compared with conventional method of hardening.

196T94

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Met

Structural transformations on annealing tempered iron. N. V. Pines. Trudy Khar'kov. Avtodor. Inst. 2, 249-58 ([illegible]); Referat. Zhur., Met. 1956, No. 1295.—Transformations on heating samples of tempered gray iron and, for comparison, carbon steel with C 0.54% were investigated. In the poured condition the iron had a pearlitic structure (ferrite ≤5%). The smaller intervals of transformation, in comparison with carbon steel, occur because Si and Mn in iron increase the stability of tetragonal and cubical martensite. As a result the points of their initial transformation are moved upward. Transformation of martensite to troostite occurs at a higher temp. (480-520°) than steel (~400°). The abs. value of vol. change on annealing tempered gray iron is greater than for steel. On raising the temp. of tempering (from 900 to 1000°) vol. changes increase as a consequence of higher concn. of C in austenite. Reducing the rate of cooling on tempering (tempering in oil instead of water) reduced the vol. changes. Hardness measurements showed a continuous reduction with increase of annealing

Pines, N. YA

USSR.

Crystal Lattice Distortions and Sintering of Metal Powders. L. I. Gal'perina, Ya. E. Geguzin, N. Ya. Pines, and L. V. Renushkov. (*Doklady Akademii Nauk S.S.S.R.*, 1953, 88, (2), 305-308). The relief of stresses and lattice distortions during the sintering of briquetted metallic powders (copper, iron, and nickel) was studied by X-ray investigations and measurements of the heat capacity of specimens. From the experimental data the activation energy of the relief of microstresses was determined. It was found that microstresses have no practical influence on the sintering process, since the major part of the latent energy is released before the sintering temperature is reached. The decrease in the activation energy of self-diffusion in compacted powder specimens indicates that some residual distortions are retained by the lattice up to high temperatures.—V. G.

PINES, N. Ya.

B. T. R.
Vol. 3 No. 5
May 1954
Metals--Power

④ 5

7083 **Crystal-Lattice Distortions and Sintering of Metal Powders.** L. I. Gal'perina, Ya. E. Geguzin, N. Ya. Pines, and I. V. Smushkov. *Henry Brutcher, Altadena, Calif.* Translation no. 3083, 7p. (From *Doklady Akademii Nauk SSSR,* v. 88, no. 2, 1953, p. 285-288.)

Processes of stress relief and elimination of crystal-lattice distortions in metal-powder compacts studied by X-ray diffraction and by heat capacity measurements. Table, graphs. 7 ref [illegible]S, [illegible]

"Duties of [illegible]

Health [illegible]

[illegible] Sr. [illegible]

Prophylactic A[illegible]

[illegible]

[illegible], A.M

"Let Us St[illegible] the [illegible] Institute[illegible]," [illegible], 15, [illegible], Sen[illegible], A[illegible] for Therapeutic [illegible], [illegible]

PINES, S.R.

Inteussusception of the intestines into the stomach through a gastroenteroanastomosis. Khirurgiia Supplement:35 '57. (MIRA 11:4)

1. Iz khirurgicheskogo otdeleniya (zav. S.R.Pines) Nazyvayevskoy mezhrayonnoy bol'nitsy (glavnyy vrach A.A.Gril'chuk) Omskoy oblasti.
(INTESTINES--INTUSSUSCEPTION)

Pines, V. G.

3

✓ Use of Mathematical Statistics for Studying the Reproducibility of the Chemical Analysis of Non-Alloy Steels. Yu. A. Genshaft, V. V. Nalimov and V. G. Pines. (*Zavodskaya Laboratoriya*, 1955, 21, (7), 877–880). [In Russian]. Results of chemical determinations of carbon, sulphur and phosphorus in steel are subjected to statistical analysis and reproducibilities at various concentration levels are discussed.

Metal

PINES, V.G.; NALIMOV, V.V.; GENSHAFT, S.A.

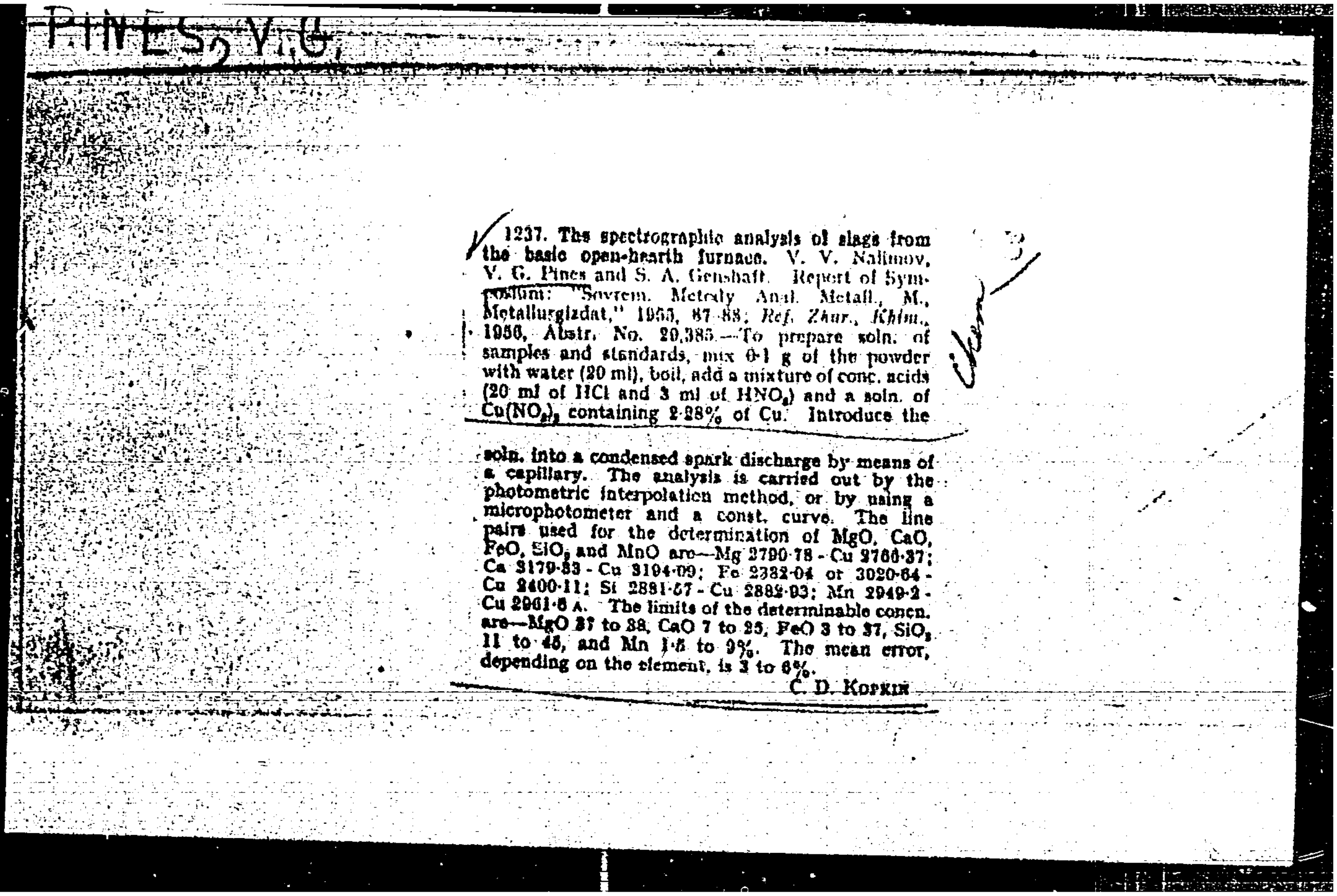
Statistical study of the instrumental error in working with FEK and FEK-M photoelectric colorimeters. Trudy kom. anal. khim. 8:279-284 '58. (MIRA 11:8)

1.Kazakhskiy metallurgicheskiy zavod.
(Colorimeters)

ANOSOV, V.I.; SAVOSTIN, A.M.; FINES, V.G.; MILYUTKINA, V.P.; MIROPOL'SKAYA, M.A.; FEDOTOVA, N.I.; SAMOKHVALOV, G.I.

Preparation of γ-,γ-dimethylallyl alcohol and isopropenylethyl alcohol from the product resulting from the condensation of isobutylene. Zhur. ob. khim. 31 no.4:1154-1157 Ap '61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Butenol) (Pentenol)



PINES, V.G.

1237. **The spectrographic analysis of slags from the basic open-hearth furnace.** V. V. Nalimov, V. G. Pines and S. A. Genshaft. Report of Symposium: "Sovrem. Metody Anal. Metall., M., Metallurgizdat," 1955, 87–88; *Ref. Zhur., Khim.*, 1956, Abstr. No. 20,385.—To prepare soln. of samples and standards, mix 0·1 g of the powder with water (20 ml), boil, add a mixture of conc. acids (20 ml of HCl and 3 ml of HNO_3) and a soln. of $Cu(NO_3)_2$ containing 2·28% of Cu. Introduce the soln. into a condensed spark discharge by means of a capillary. The analysis is carried out by the photometric interpolation method, or by using a microphotometer and a const. curve. The line pairs used for the determination of MgO, CaO, FeO, SiO_2 and MnO are—Mg 2790·78 - Cu 2766·37; Ca 3179·33 - Cu 3194·09; Fe 2382·04 or 3020·64 - Cu 2400·11; Si 2881·57 - Cu 2882·93; Mn 2949·2 - Cu 2961·6 Å. The limits of the determinable concn. are—MgO 37 to 38, CaO 7 to 25, FeO 3 to 37, SiO_2 11 to 45, and Mn 1·5 to 9%. The mean error, depending on the element, is 3 to 6%.

C. D. Kopkin

GENSHAFT, S.A.; NALIMOV, V.V.; PINES, V.O.

Use of mathematical statistics in the study of the reproducibility of chemical analyses of unalloyed steel. Zav.lab.21 no.7:877-880 '55. (MIRA 8:10)

1. Kazakhskiy metallurgicheskiy zavod
(Steel--Analysis)

[illegible]

[illegible]

[illegible]

FINES, V. L. [illegible] ~~[illegible]~~ : afferent effe[illegible] impuls[illegible] i[illegible] [illegible]." [illegible] wi[illegible] [illegible] Ac[illegible] [illegible] I. P. Pavlov, [illegible] [illegible], [illegible] , 111,

USSR/Human and Animal Physiology (Normal and Pathological) T
Nervous System. Vegetative Nervous System.

Abs Jour : Ref Zhur Biol., No 6, 1959, 27020

Author : Pinos, Yu.L.

Inst : Institute of Physiology, Academy of Sciences USSR

Title : Electrophysiological Characteristics of Efferent Impulsation in Kidney Nerves.

Orig Pub : Tr. In-ta fiziol. AN SSSR, 1957, 6, 100-108

Abstract : In acute experiments on cats under amytal narcosis, two types of efferent impulses (EI) were observed in the central segments of kidney nerves: of high voltage (40-100 μv) 2-8msec., group - in the rhythm of pulse and respiration, and of low voltage (20-40 μv) 10-20 msec., uninterrupted EI. Group EI were prevalent in deep narcosis with lowering of blood pressure and frequent and

Card 1/2

USSR/Human and Animal Physiology (Normal and Pathological) T
Nervous System. Vegetative Nervous System.

Abs Jour : Ref Zhur Biol., No 6, 1959 27020

uninterrupted - in shallow narcosis with relatively high blood pressure (BP). Introduction into the vein of 0.5 ml.of adrenalin (in solution 1 · 10 0000 increased BP, decreased group EI and intensified fast impulsation. decrease of BP by means of blood letting or introduction of 0.5 ml of acetylcholine (in solution 1 : 1000) intensified group EI and weakened the uninterrupted ones. Apparently the first reflect the activity of the sympathetic and the latter of parasympathetic fibers. -- A.M. Ryabinovskaya

Card 2/2

PINES, Yu.L. (Leningrad)

Afferent and efferent impulses in the renal nerves in experimental renal hypertension. Pat. fiziol. eksp. ter. 7 no.5:43-45 S-O'63 (MIRA 17:2)

1. Iz laboratorii elektrofiziologii (zav. V.Ye. Delov) Instituta fiziologii imeni I.P.Pavlova (direktor - akademik V.N. Chernigovskiy) AN SSSR.

PINES, Yu.L.

Electrophysiological characteristics of afferent connections between kidneys and the central nervous system. Fiziol. zhur. 46 no.11:1380-1386 N '60. (MIRA 13:11)

1. From the Elestrophysiological Laboratory of Pavlov Institute of Bhysiology, Academy of Sciences of the U.S S R., Leningrad.
(KIDNEYS--INNERVATION)

PINES, Yu.L.

Electrophysiological interpretation of efferent conduction in renal nerves. Trudy Inst. fiziol. 6:100-108 '57. (MIRA 11:4)

1. Laboratoriya elektrofiziologii (zaveduyushchiy V.Ye. Delov).
(KIDNEYS--INNERVATION)

PINES, Yu. L.

Reflexes

Changes in the reflexes of the nervous system during sleep induced [illegible] and hypnotism. Vest. Len. Un. 7, No. [illegible], 1952.

Monthly List of Russian Accessions, Library of Congress, June [illegible]. Uncl.

PINET, R.

Live-line work in installations of high and very high voltage. Wiad elektrotechn 28 no.11/12:354-358 N-D '61.

1. Kierownik Oddzialu Eksploatacji w Dziale Przesylu Energii i Telekomunikacji Electricite de France.

PINET, R.

Labor under electric pressure in installations of high and very high voltage. Wiad elektrotech 28 no.11/12:354-358 N-D '61.

1. Kierownik Oddzialu Eksploatacji w Dziale Przesylu Energii i Telekomunikacji, Electricte de France.

Viscosity of water ammonia [illegible] ammonia. [illegible]

PINEVICH, G.

Viscosity of water ammonia [illegible] ammonia. G. Pinevich. [illegible]

[illegible]

PINEVICH, G.

Viscosity of water ammonia solutions and of liquid ammonia. G. Pinevich. [illegible]

[illegible]INEVICH, [illegible], FRA[illegible]KIN, [illegible]

Device for abrasion testing of the cloth cover of [illegible].
Kauch. i rez. [illegible] no.[illegible]:51-5[illegible] [illegible] '64. MIRA 17:[illegible]

1. Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy.

PINEVICH, G.

Viscosity of water ammonia sol[illegible] ammonia. G. Pinevich. [illegible]

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Viscosity of water-ammonia solutions and of liquid ammonia. G. Pinevich. *Kholod. Tekh.* 20, No. 3, 30-7(1948).—The following values in centipoises were obtained. For 8.8% NH_4OH 1.445 at 10°, 0.832 at 40°, 0.500 at 50°, 0.407 at 70°, 0.313 at 90°, 0.252 at 110°, 0.212 at 130°, 0.178 at 150°; for 19.6% NH_4OH 1.632, [illegible] 0.424, 0.320, 0.258, 0.200 [illegible] for [illegible] 0.981, 0.918, 0.424, 0.320, 0.258, 0.200 [illegible] 0.423, 0.251, 0.204 NH_4OH 1.065, 1.014, 0.615, 0.432, 0.423, 0.349, 0.244, 0.208 for 30.6% NH_4OH 1.612, 0.910, 0.540, 0.344, 0.208 [illegible] for 40.3% NH_4OH 1.280, 0.708, 0.440, 0.298 [illegible] for 80.4% NH_4OH 0.280, 0.338, 0.251 [illegible] for 100% NH_3 0.280 at [illegible] 0.187, 0.144 [illegible] 0.170 at [illegible] 0.152 at [illegible] 0.138 −20°, 0.183 at [illegible] at 30°, 0.125 at 50°. The concns. of solns. are given in NH_3 content. G. M. Kosolapoff

FRENK[illegible], M.M.; FINE[illegible], nauchn. red.

[Special [illegible] refrigerating [illegible] con-
ditioning plants and systems for the [illegible]
Khołodil'nye mashiny i ustanovki [illegible]
zdukha [illegible]
kondirovaniia. Moskva, TSentr. nauchn. [illegible] in-t pat[illegible]
noi informatsii i tekhniko-ek[illegible]
[illegible] [illegible]

PINEVICH, G.V., kandidat tekhnicheskikh nauk.

Calculating the aspiration in cement mills. TSement 22 no.5:19-20 S-O '56.
(MIRA 10:1)
(Crushing machinery) (Vacuum pumps)